

FIG. 1

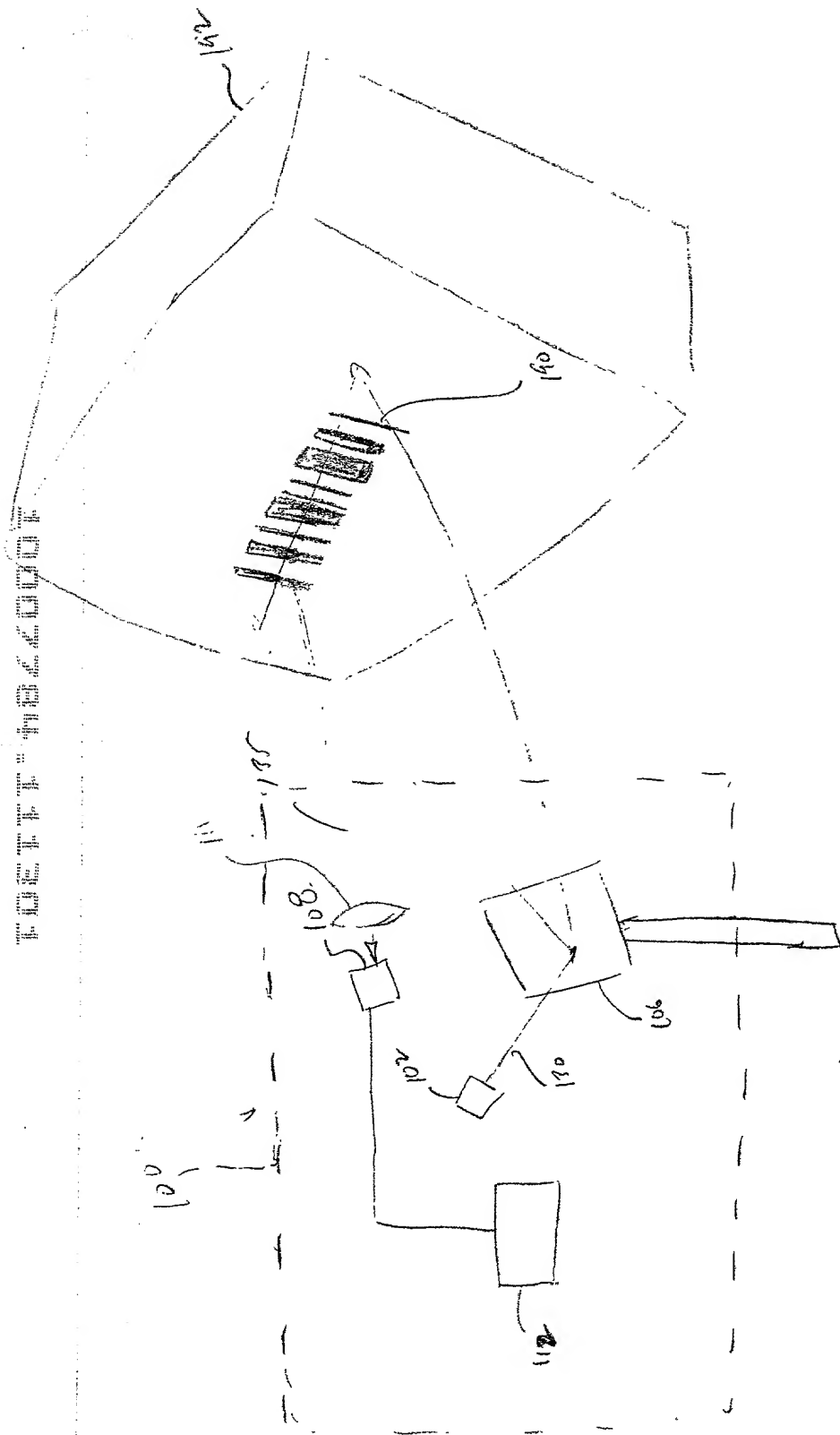
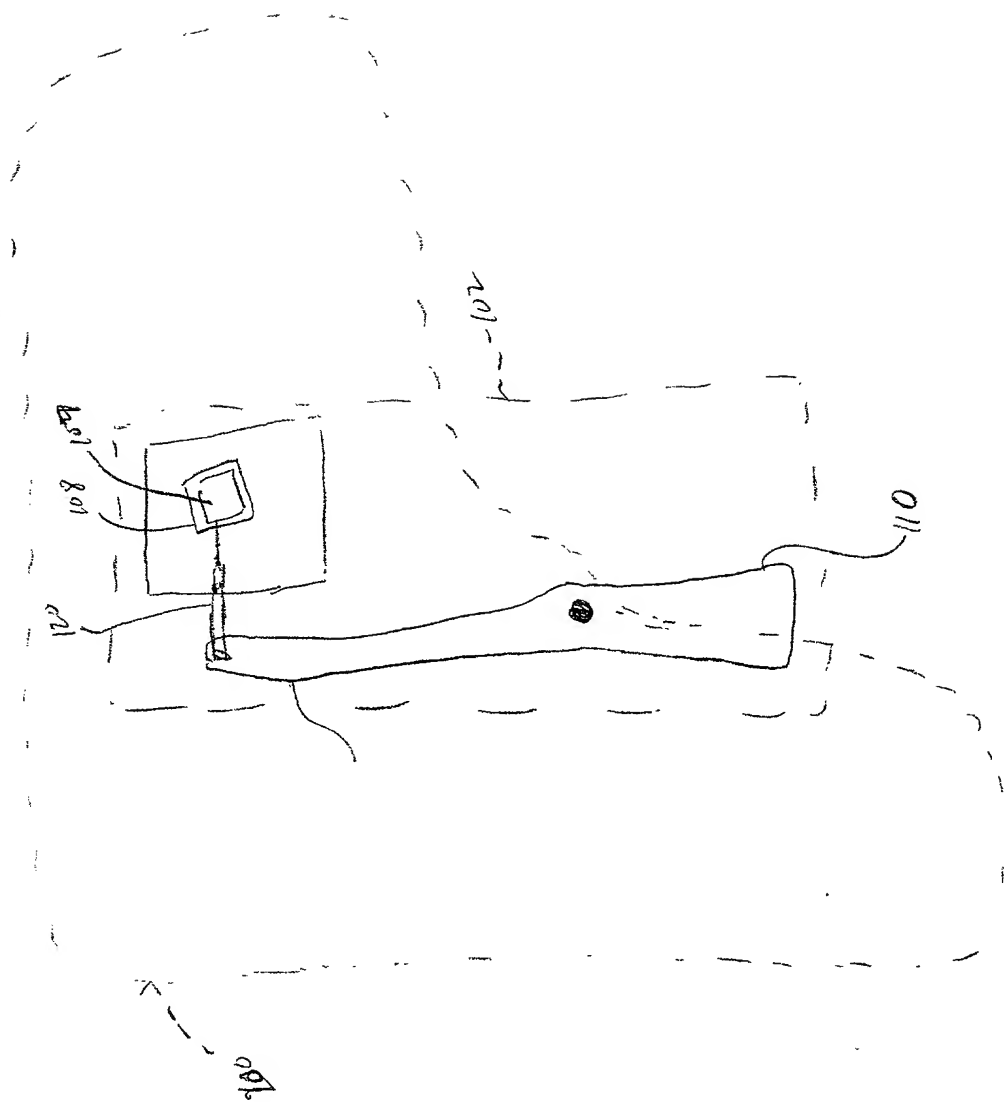


FIG. 1

FIG. 1



F/62

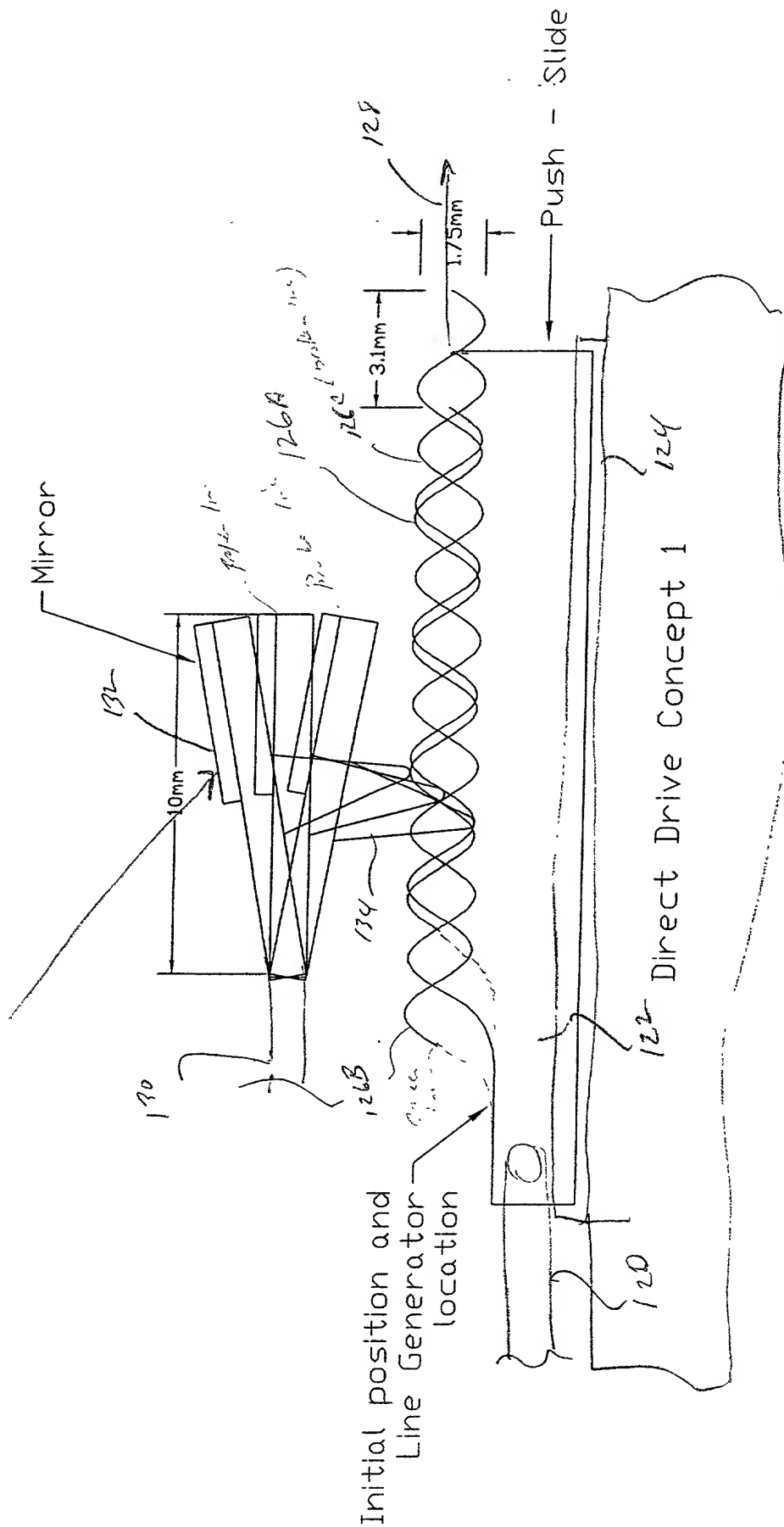
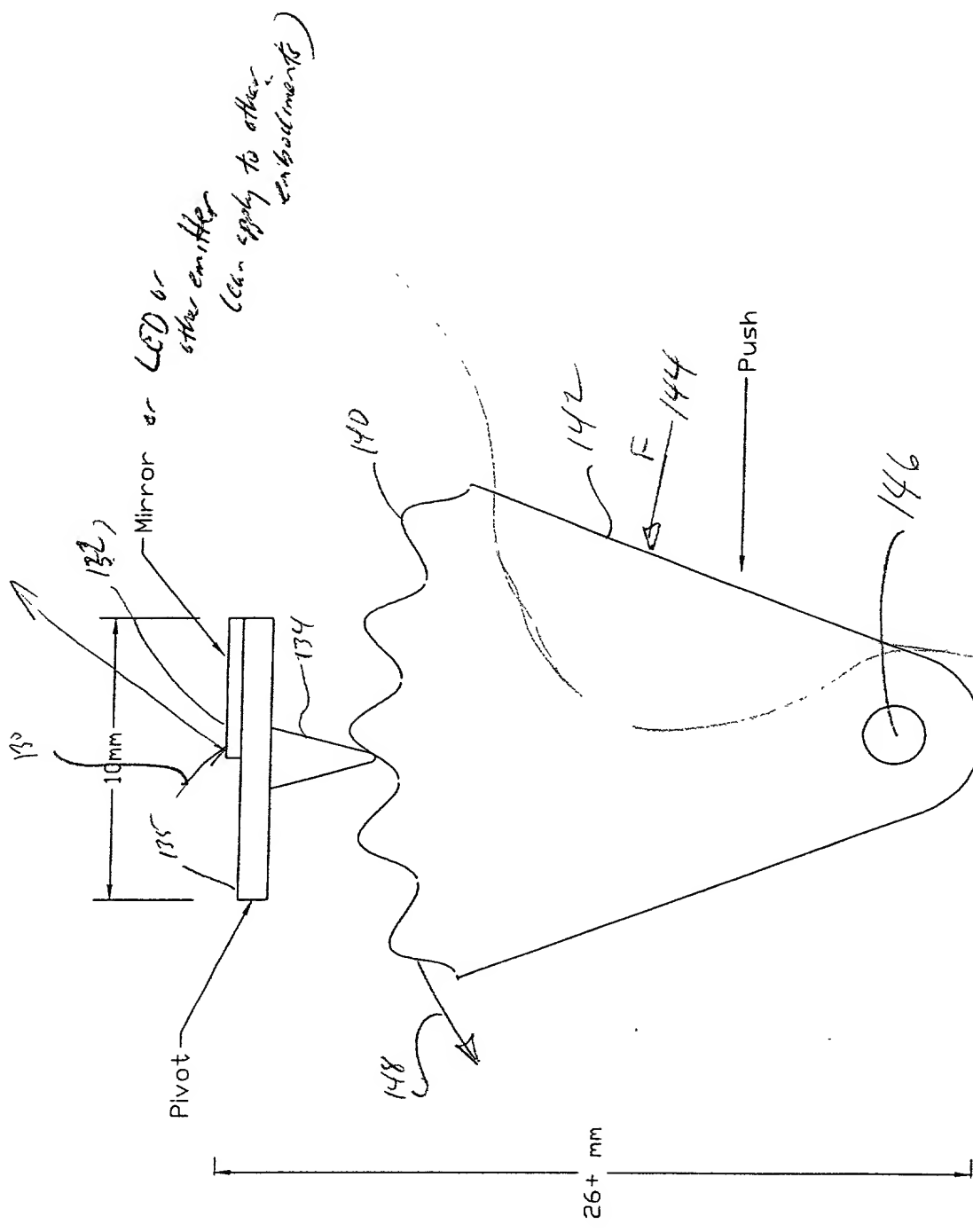
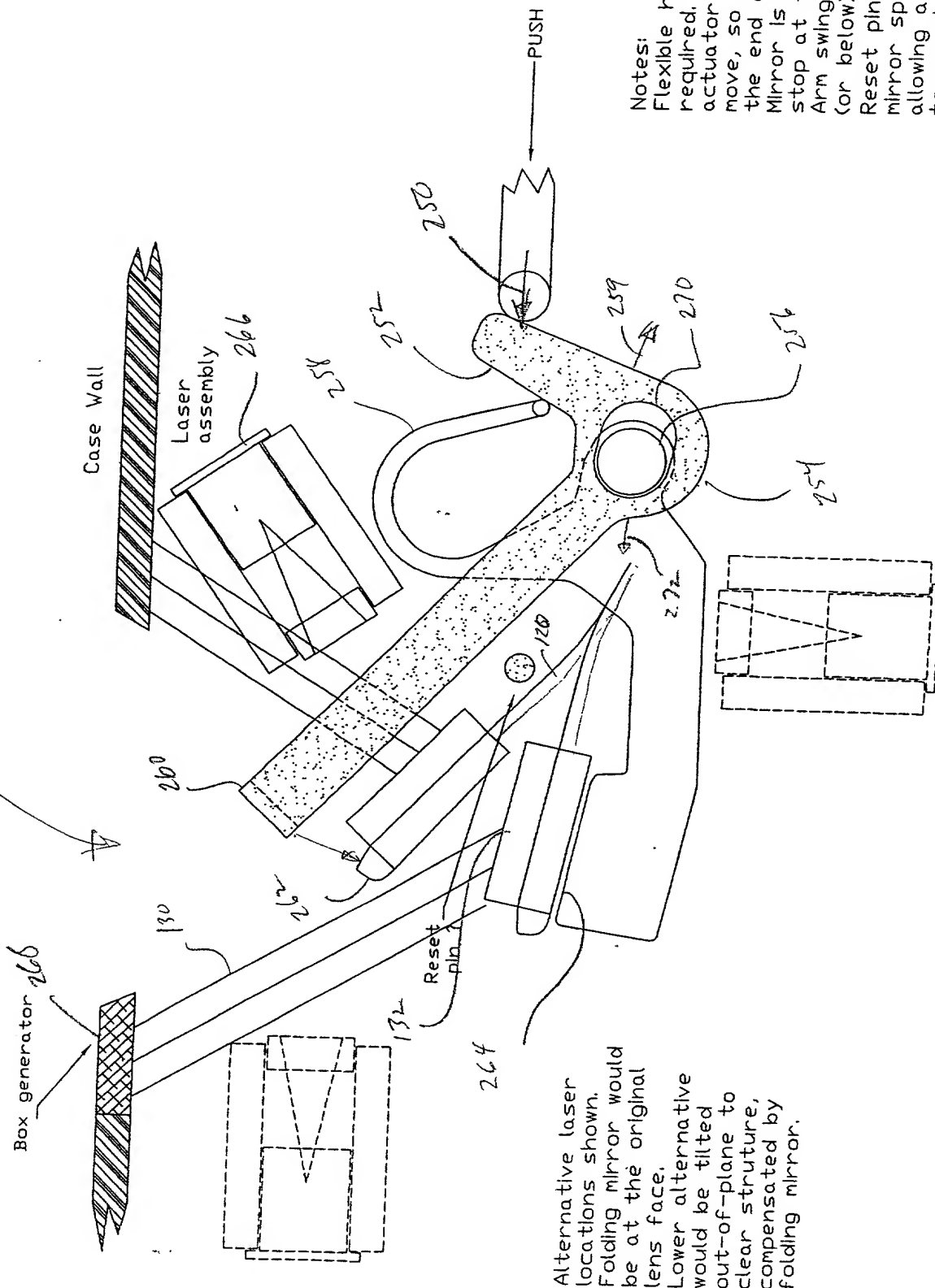


FIG. 14



Direct Drive Concept 2

Patent 4,748,000



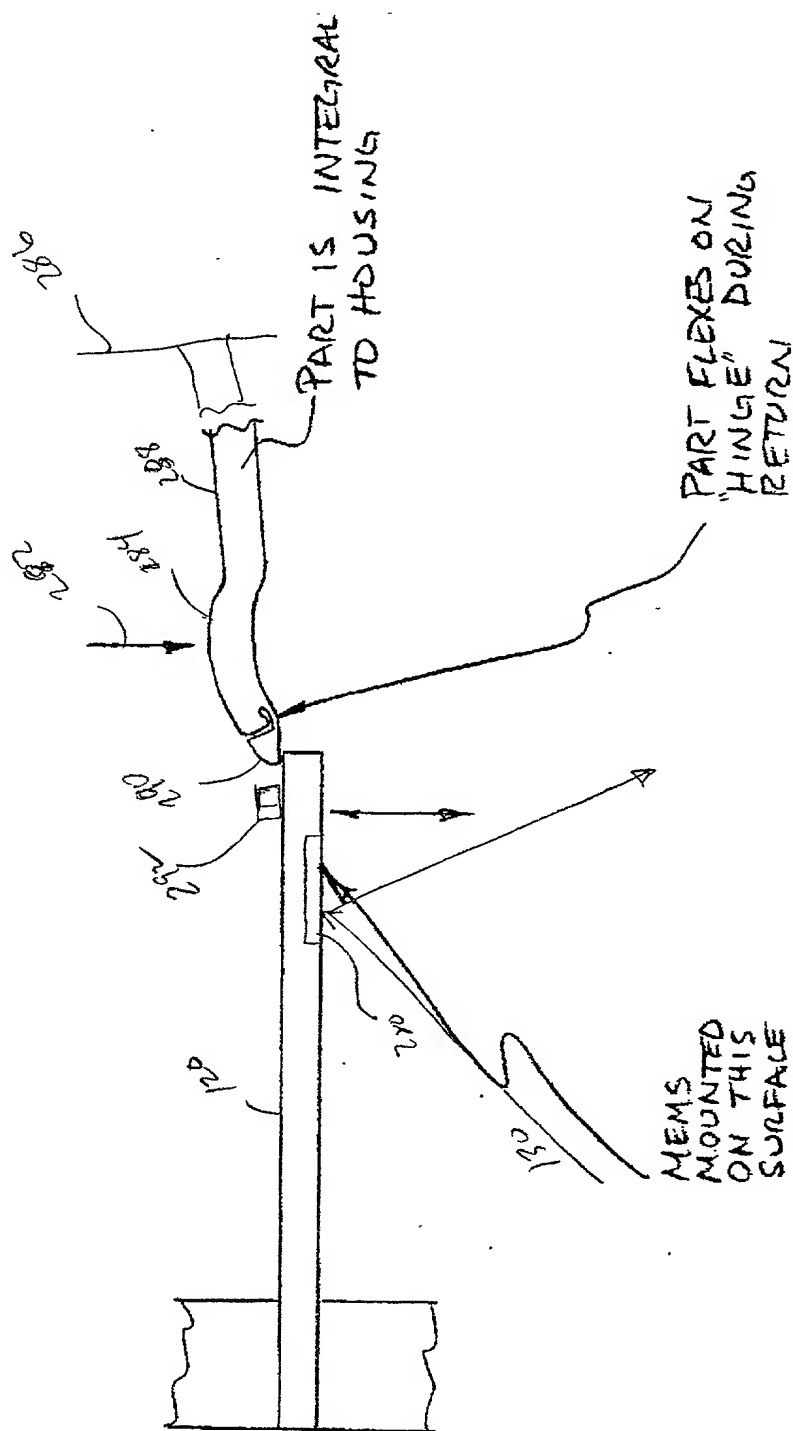
Notes:
Flexible hook not required. Cam causes actuator arm axis to move, so hook clears the end of mirror. Mirror is against stop at that point. Arm swings above (or below) mirror. Reset pin causes mirror spring to bend, allowing actuator arm to reset.

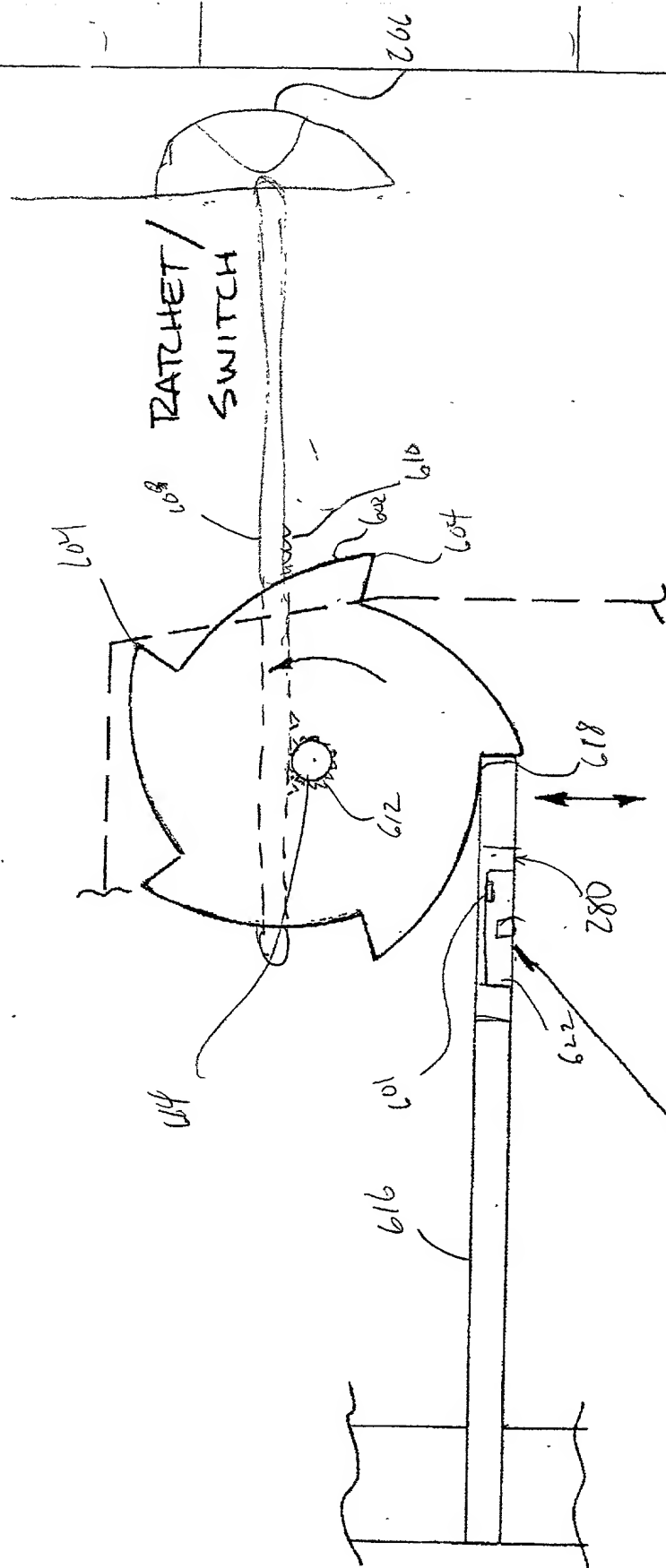
Alternative laser locations shown.
Folding mirror would be at the original lens face.
Lower alternative would be tilted out-of-plane to clear structure, compensated by folding mirror.

Concept for Another Simplified Oscillating Whiskey

FIG. 6

FLEXIBLE TIP





MEMS
MOUNTED
ON THIS
SURFACE

16.7

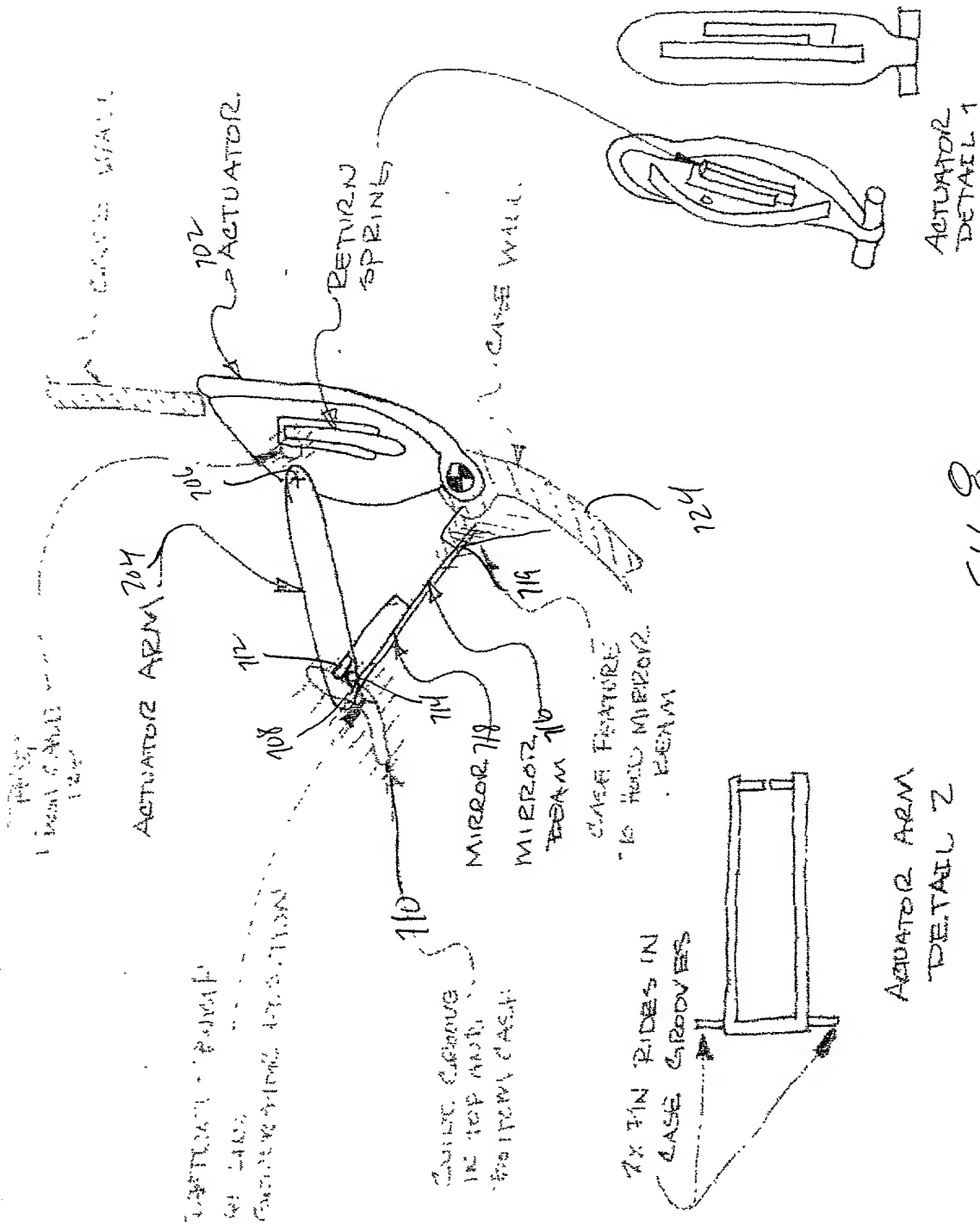
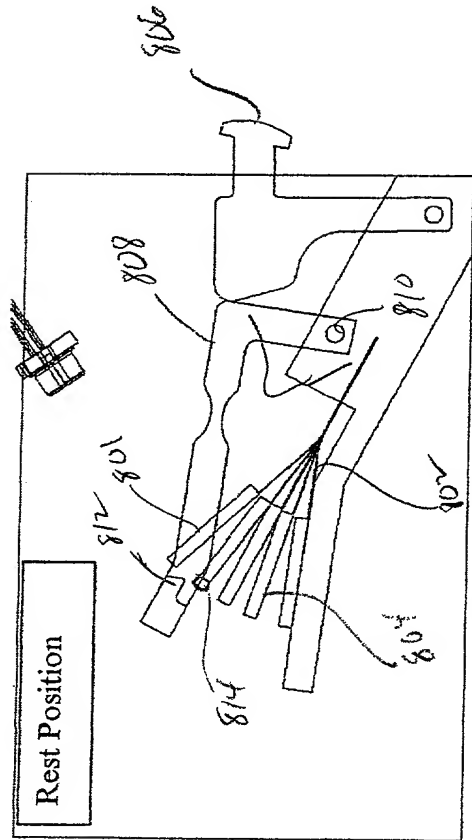


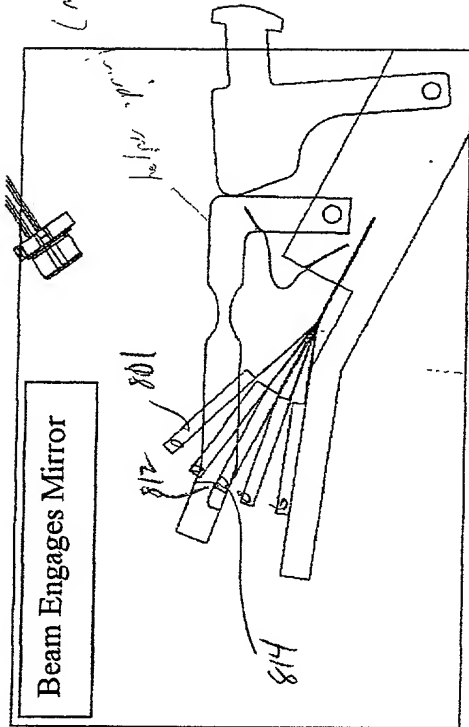
FIG. 1

Simplified Whiskey With Independent Beam

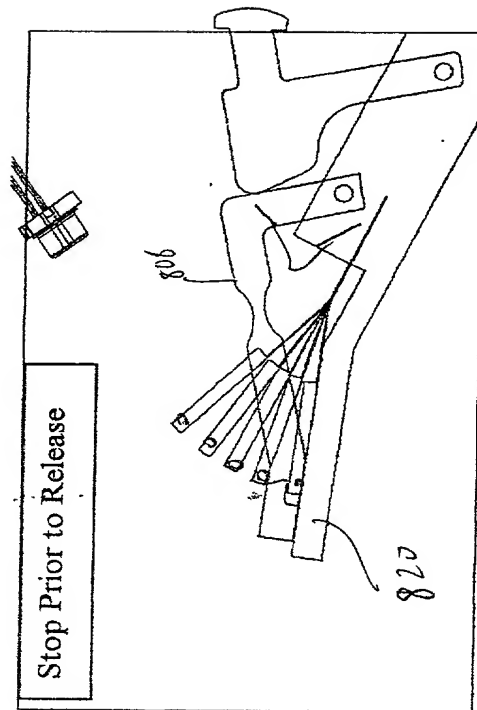
U.S. Pat. 4,132,000



9A



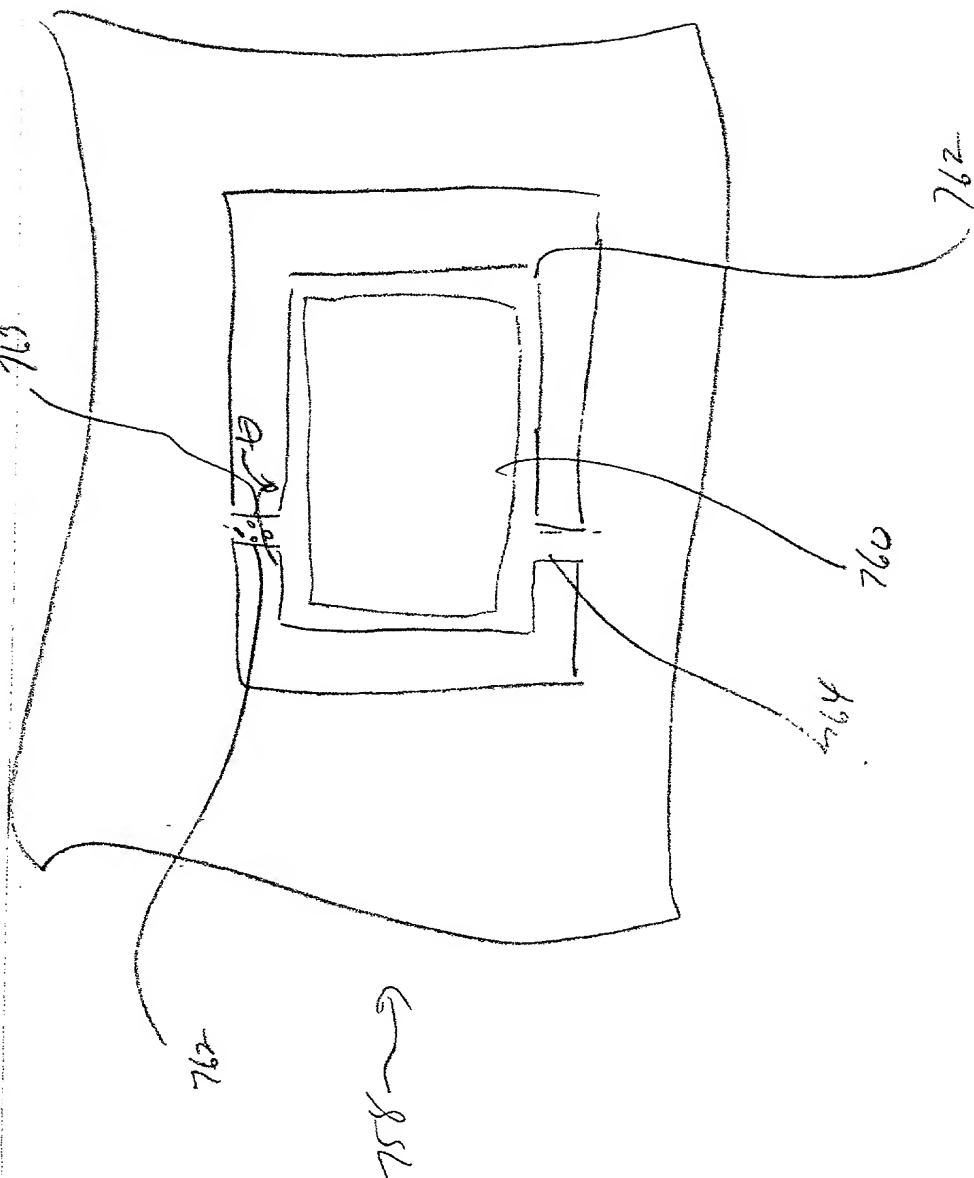
9B



9C



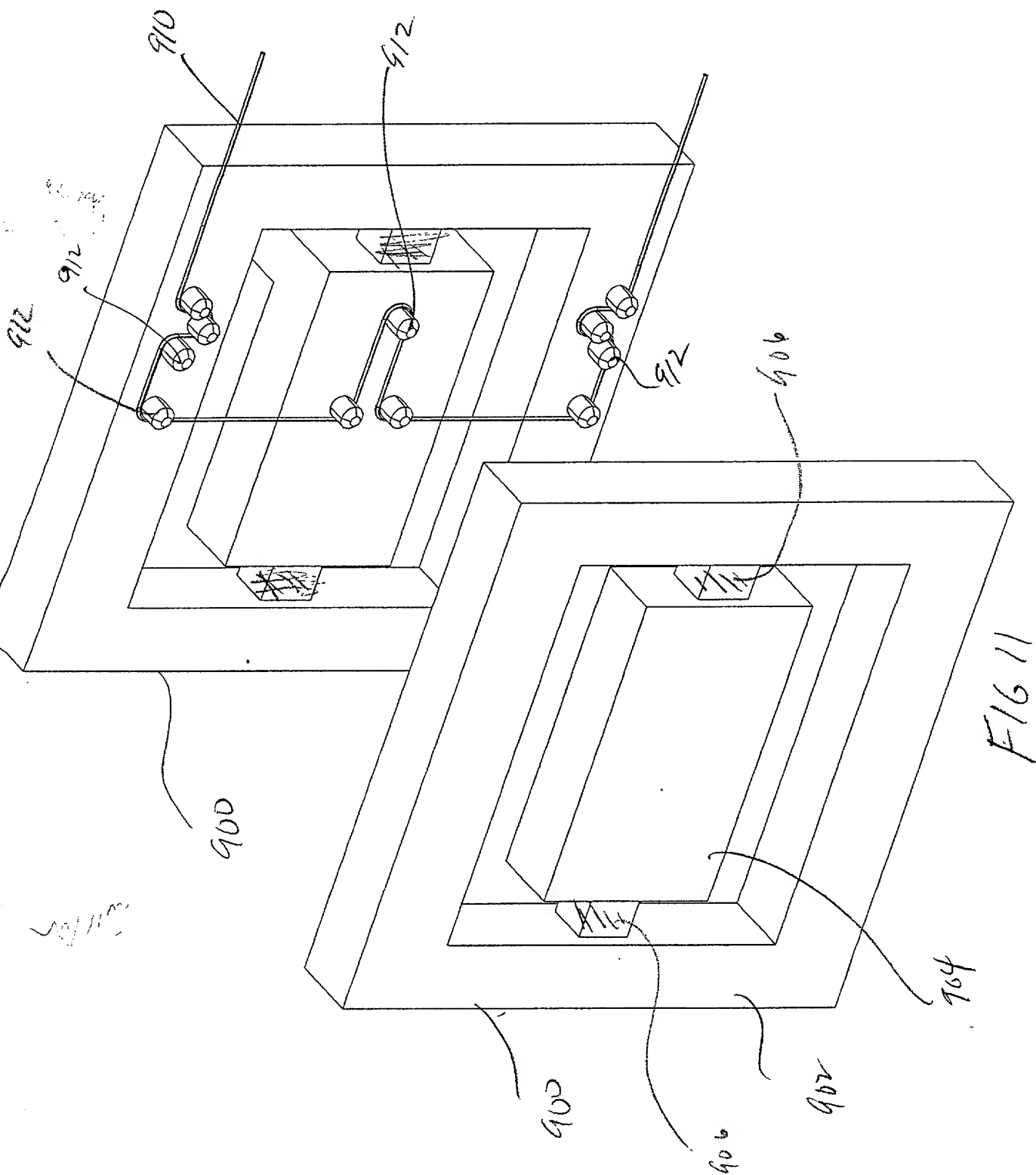
9D
 WITH NO MECHANICAL STOP
 (MIRROR OR FINGER)



F 16.90

650-552-9396

COFFEE THECOUT



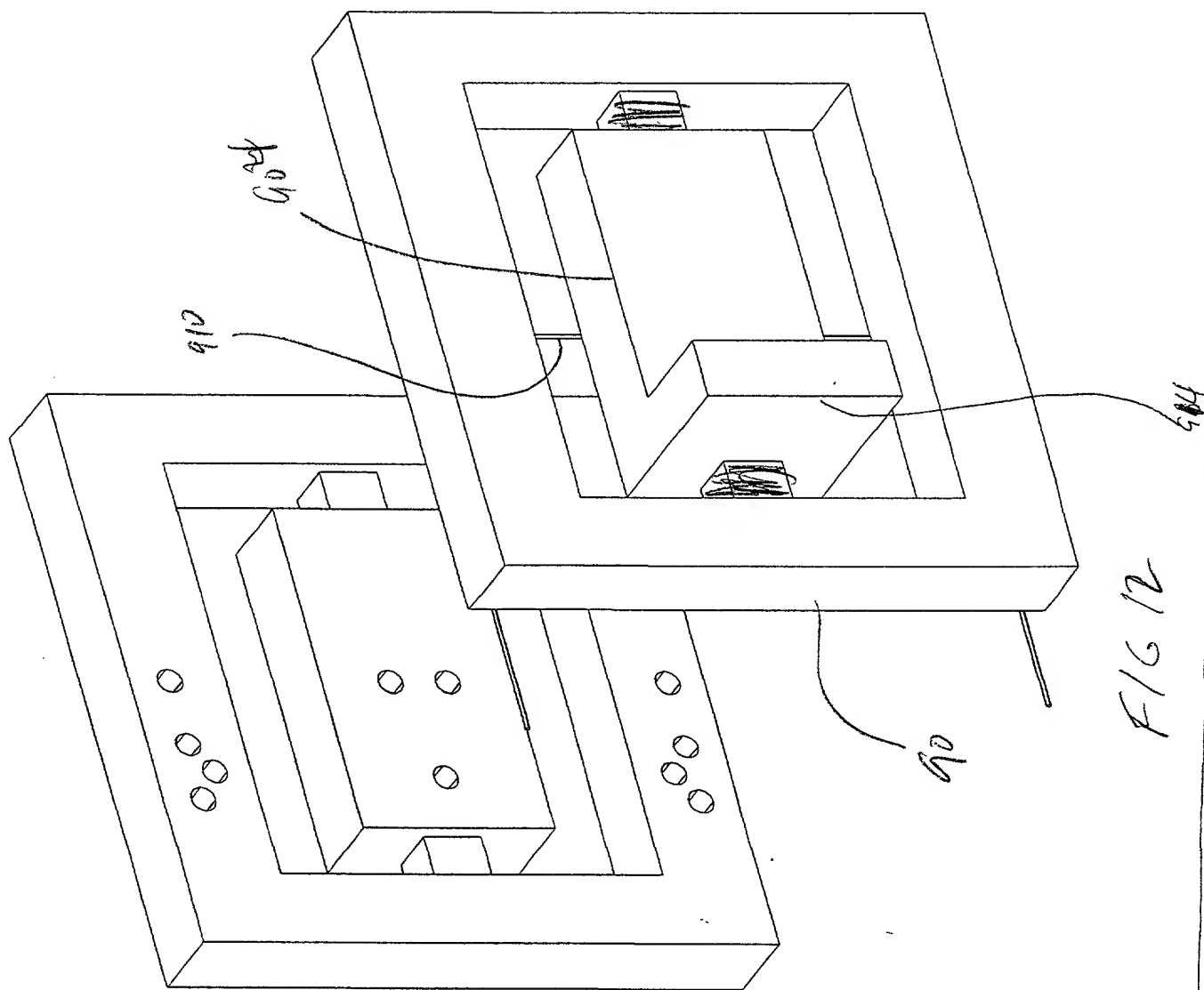
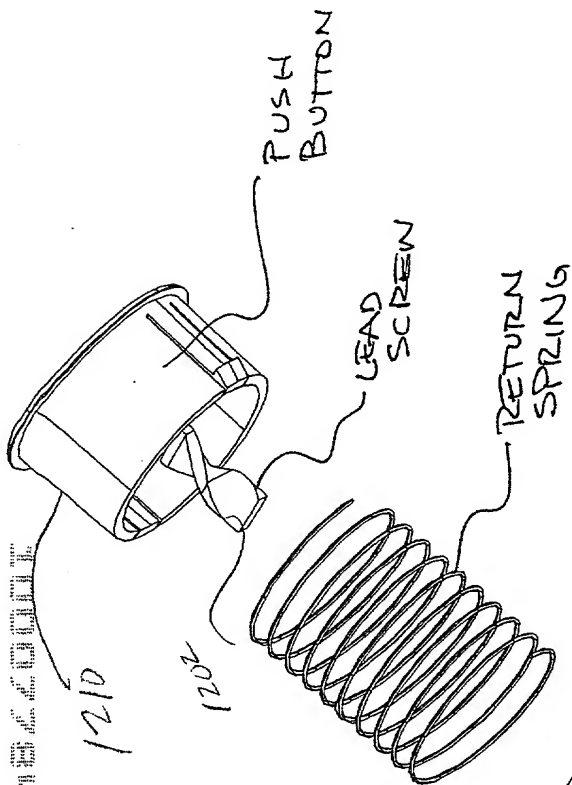


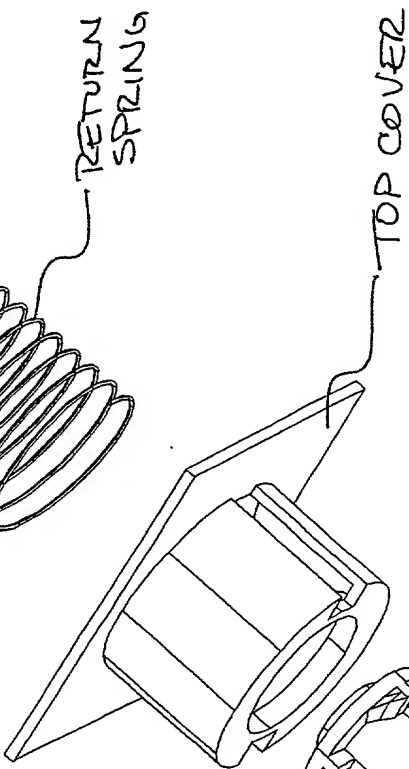
FIG. 12

FIG. 1

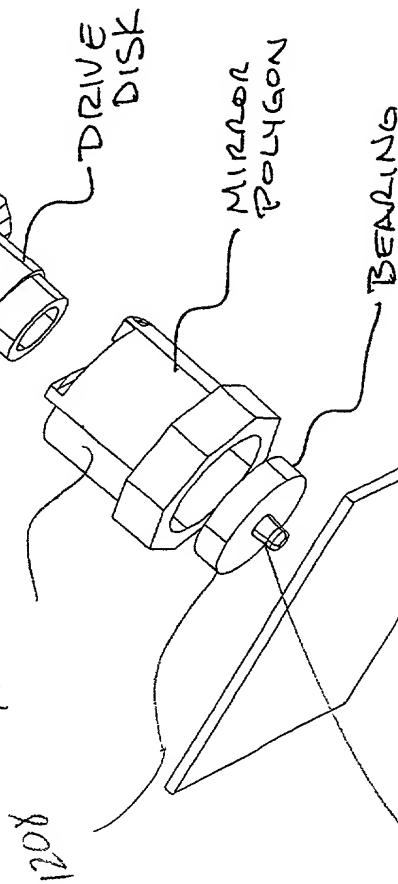
120



1212



1204



1206

BEARING

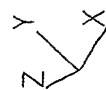
MIRROR
POLYGON

DRIVE
DISK

BOTTOM
COVER

F/G 13

LEAD SCREW



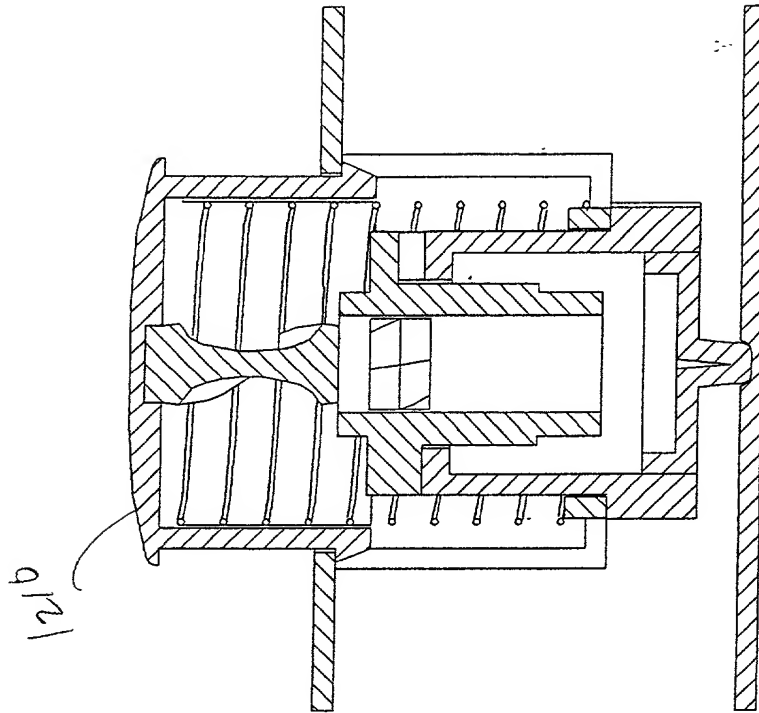
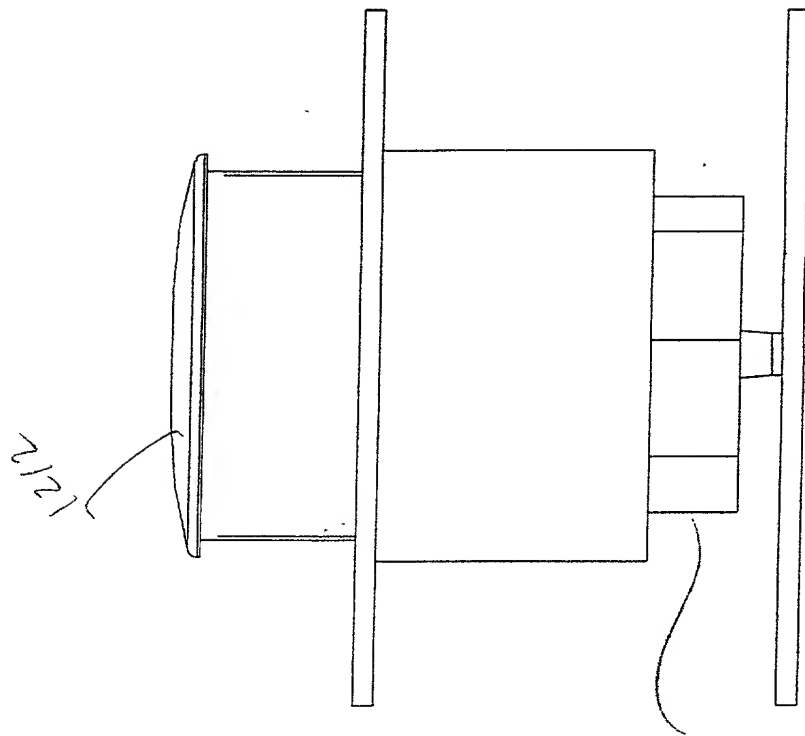


FIG. 14

LEAD SCREW

1502
COFFEE

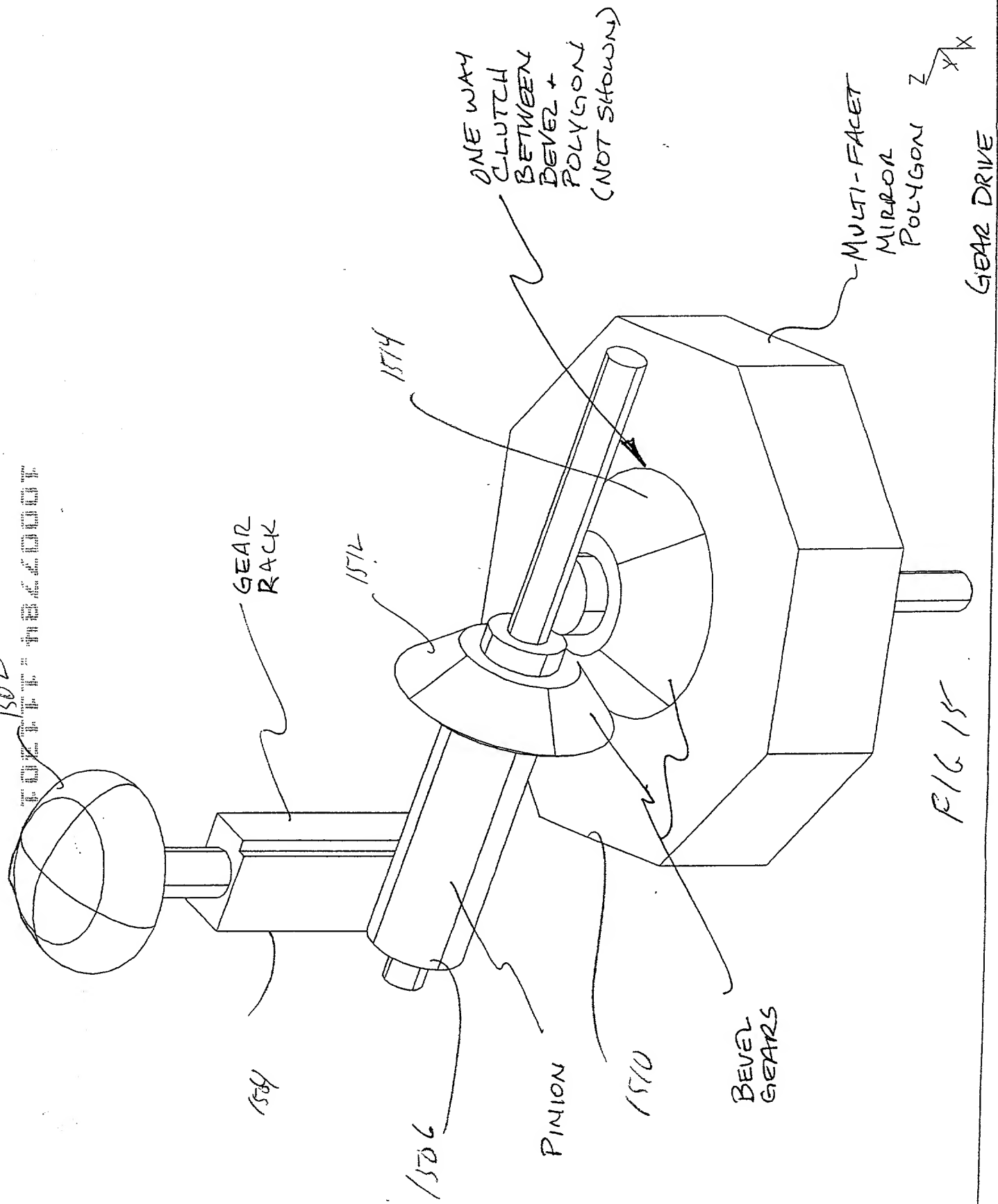


FIG 15

A CONSTANT FORCE IS APPLIED TO THE ESCAPE WHEEL. THE ESCAPE WHEEL PROVIDES AN IMPULSE TO THE BALANCE THROUGH THE LEVER, CAUSING THE BALANCE/HAIRSPRING TO OSCILLATE. EACH OSCILLATION OF THE BALANCE CAUSES THE LEVER TO ROTATE, WHICH IN TURN ALLOWS A SINGLE TOOTH OF THE ESCAPE WHEEL TO RELEASE.

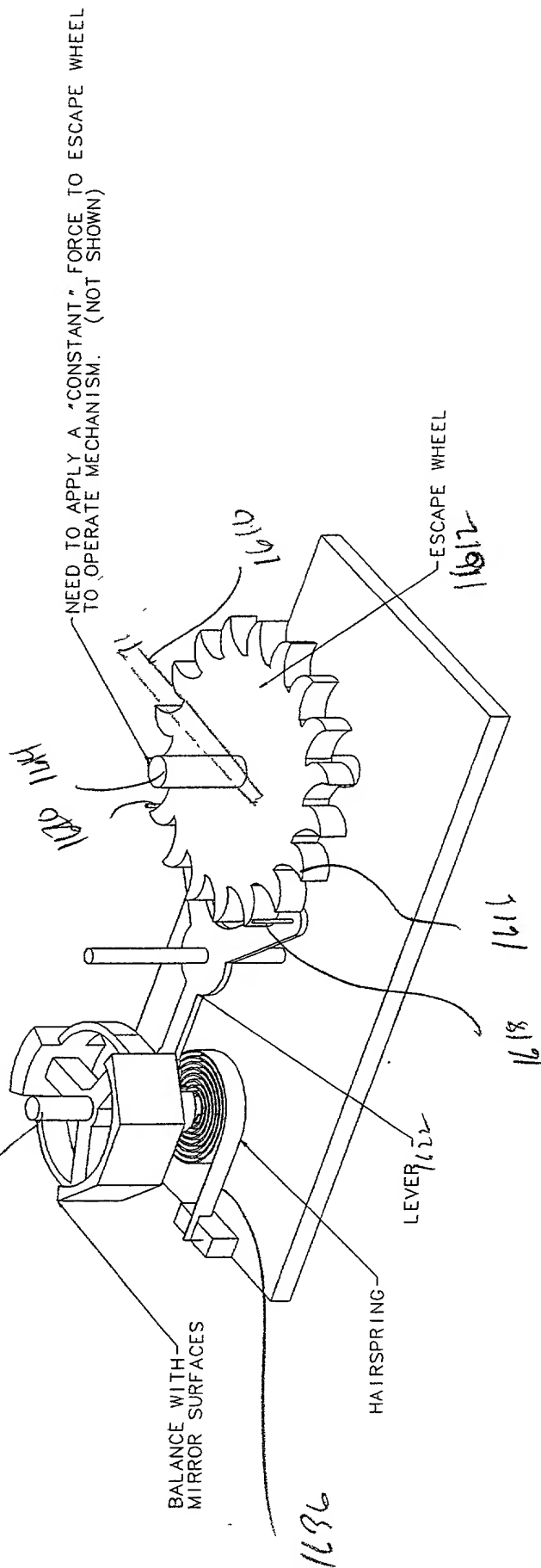


FIG 16

FIG. 16

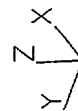
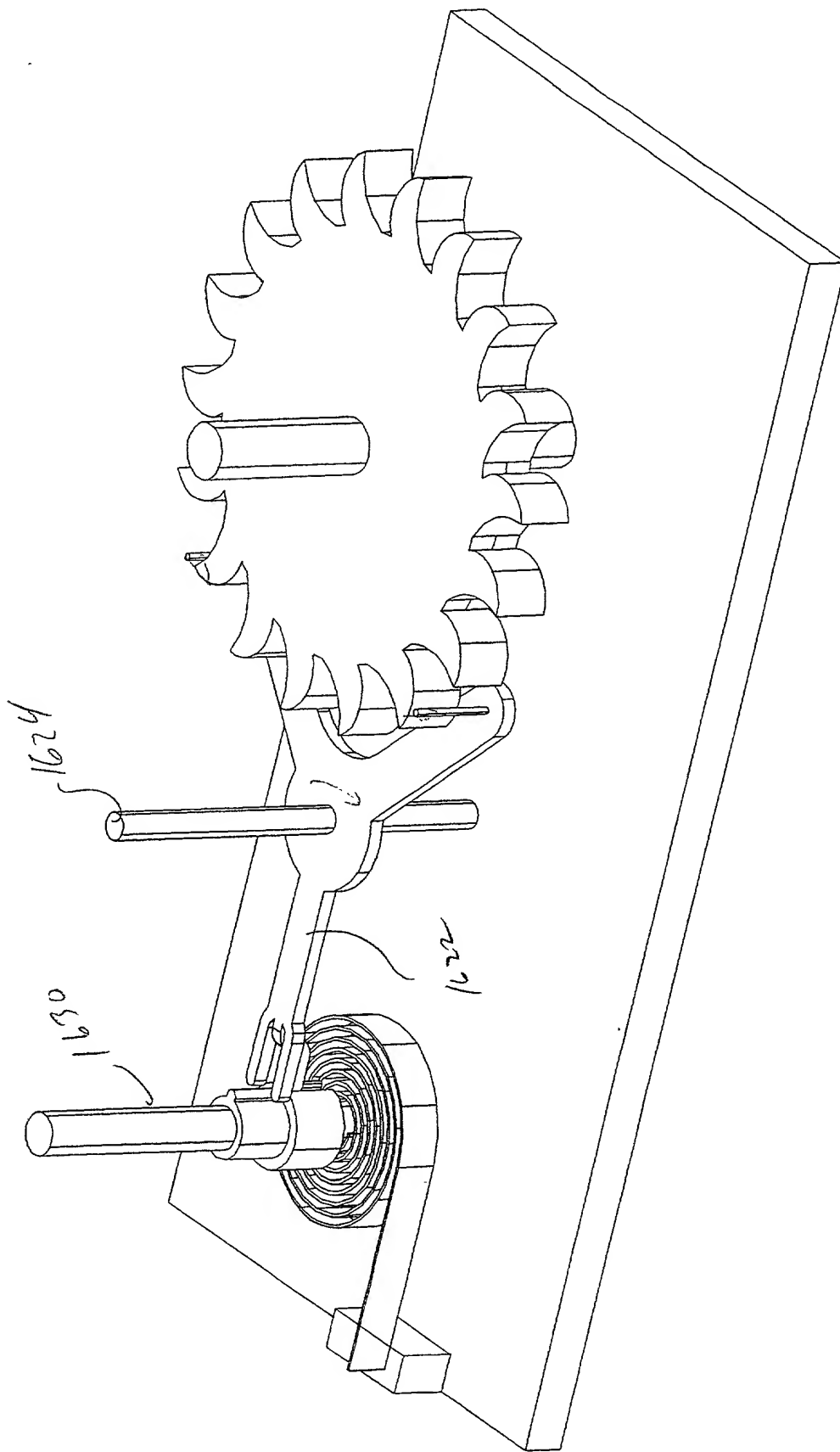


FIG. 17

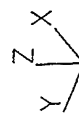


Fig 18

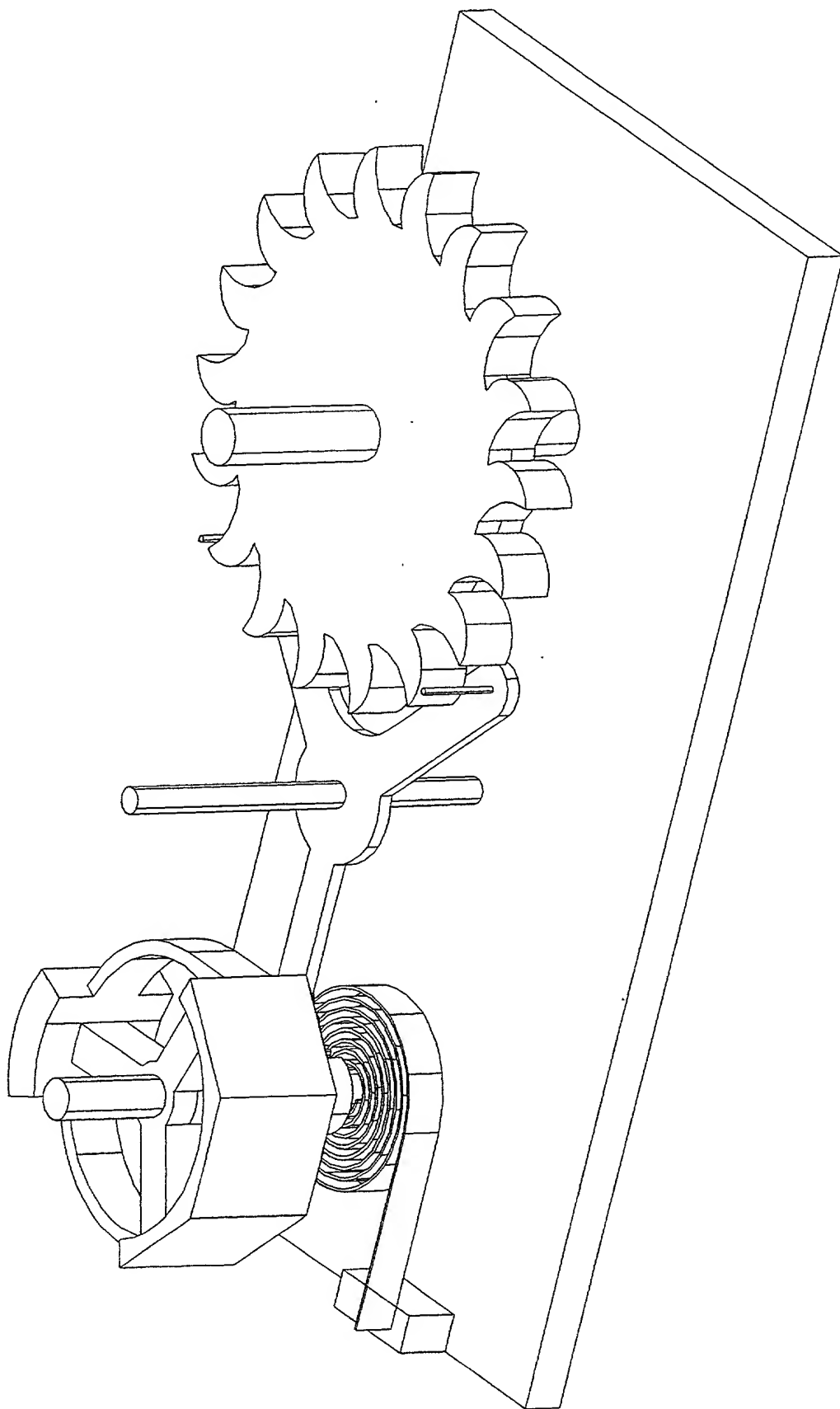
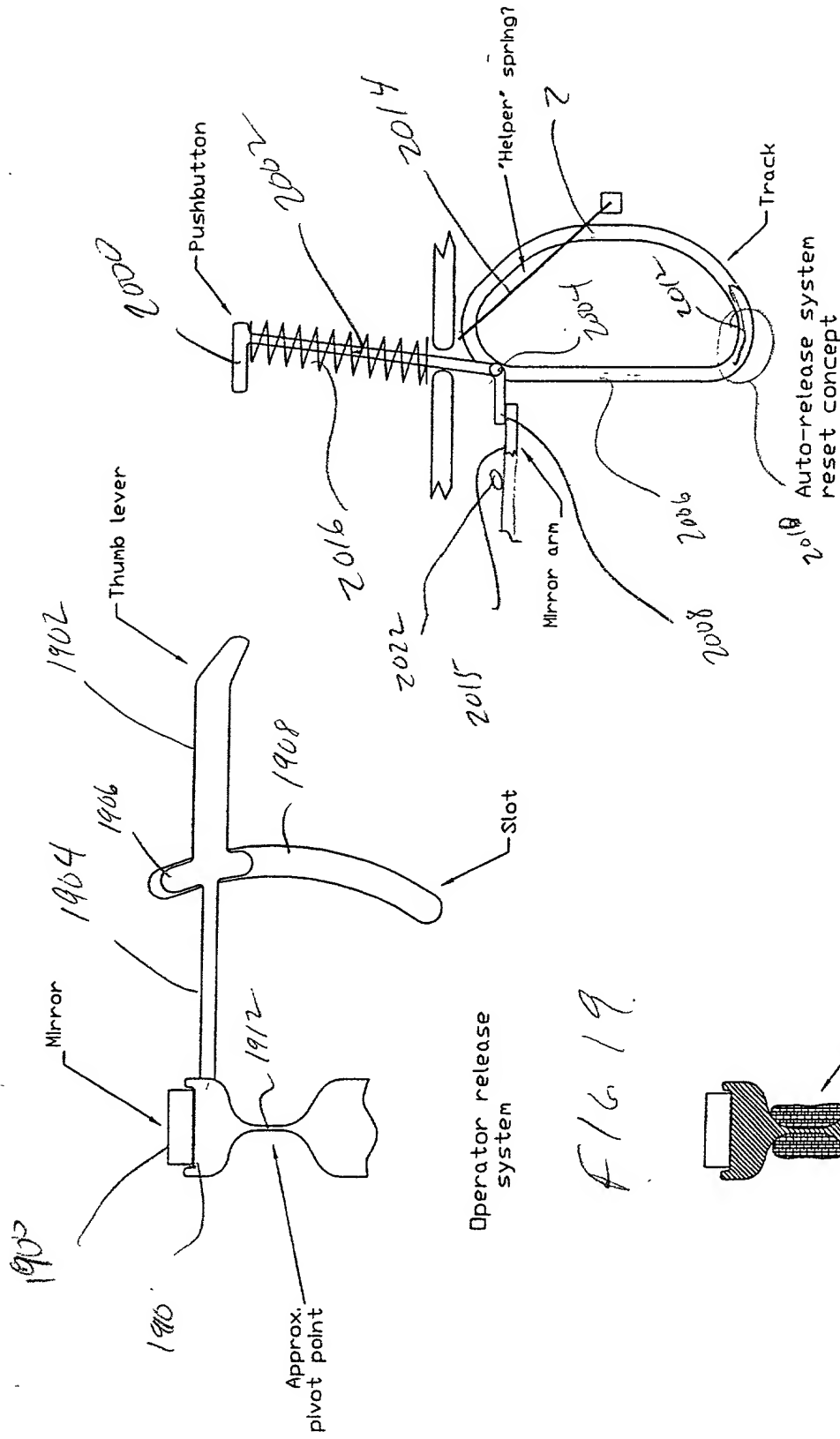


FIG. 18



Possible speed and acceleration control

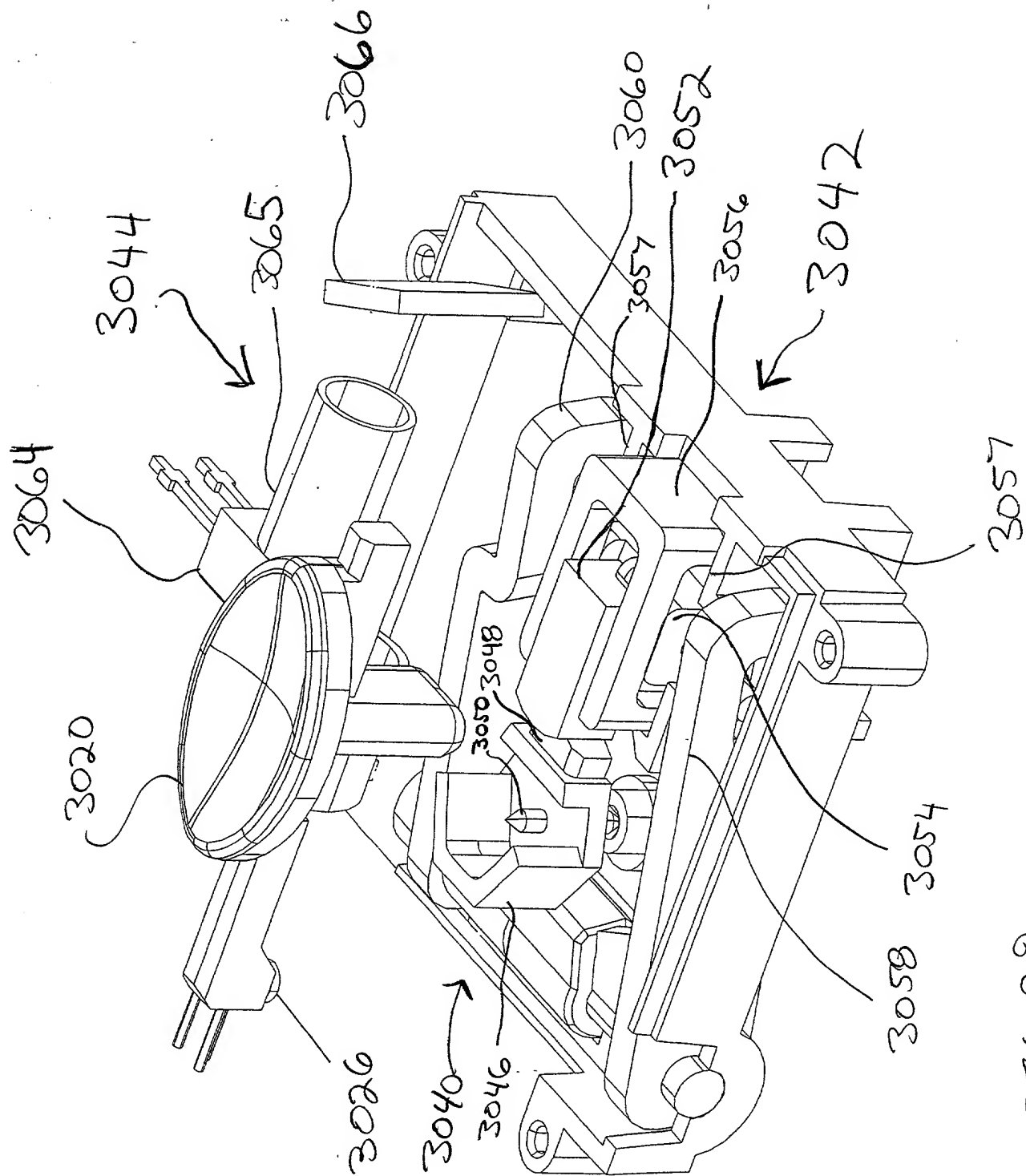
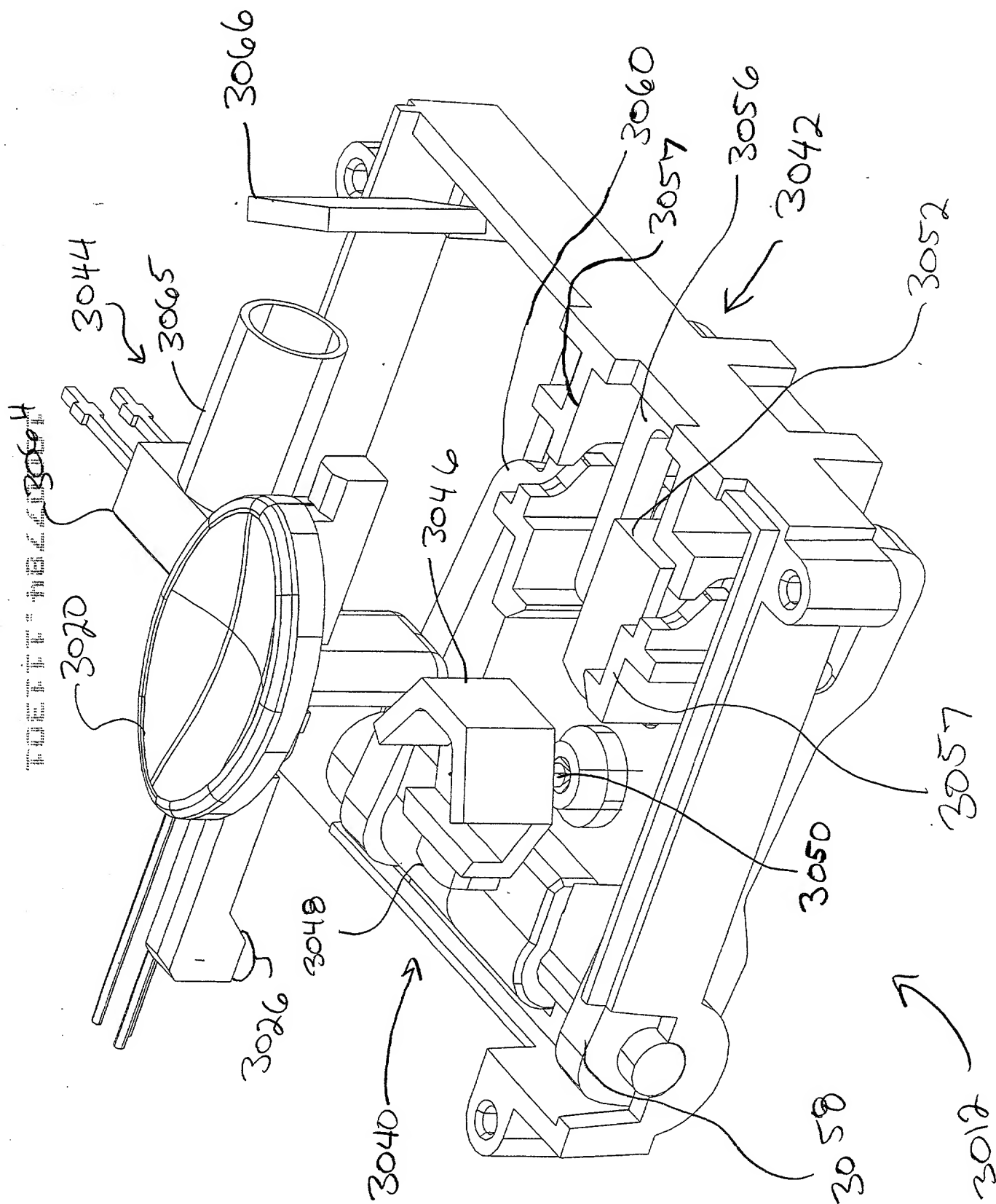


FIG. 22



32.11.11

[illegible]

76.94
3057

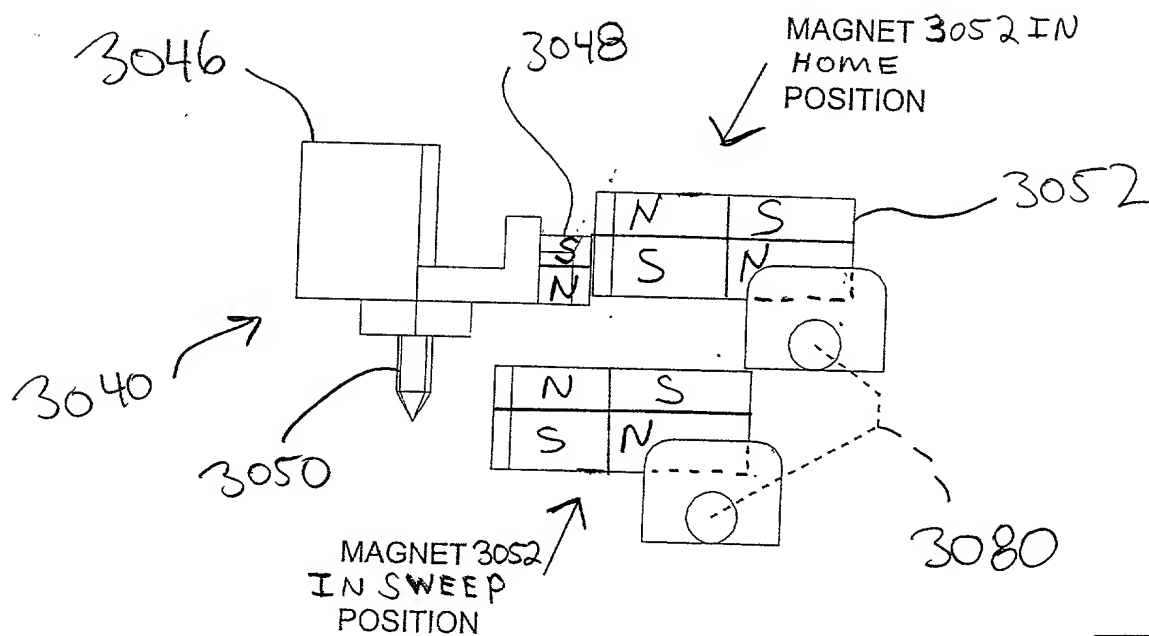


FIG. 25A

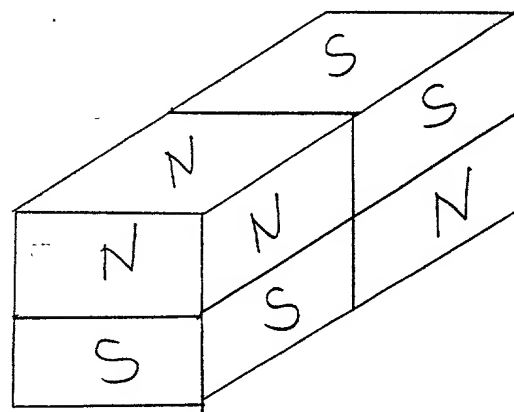


FIG. 25B

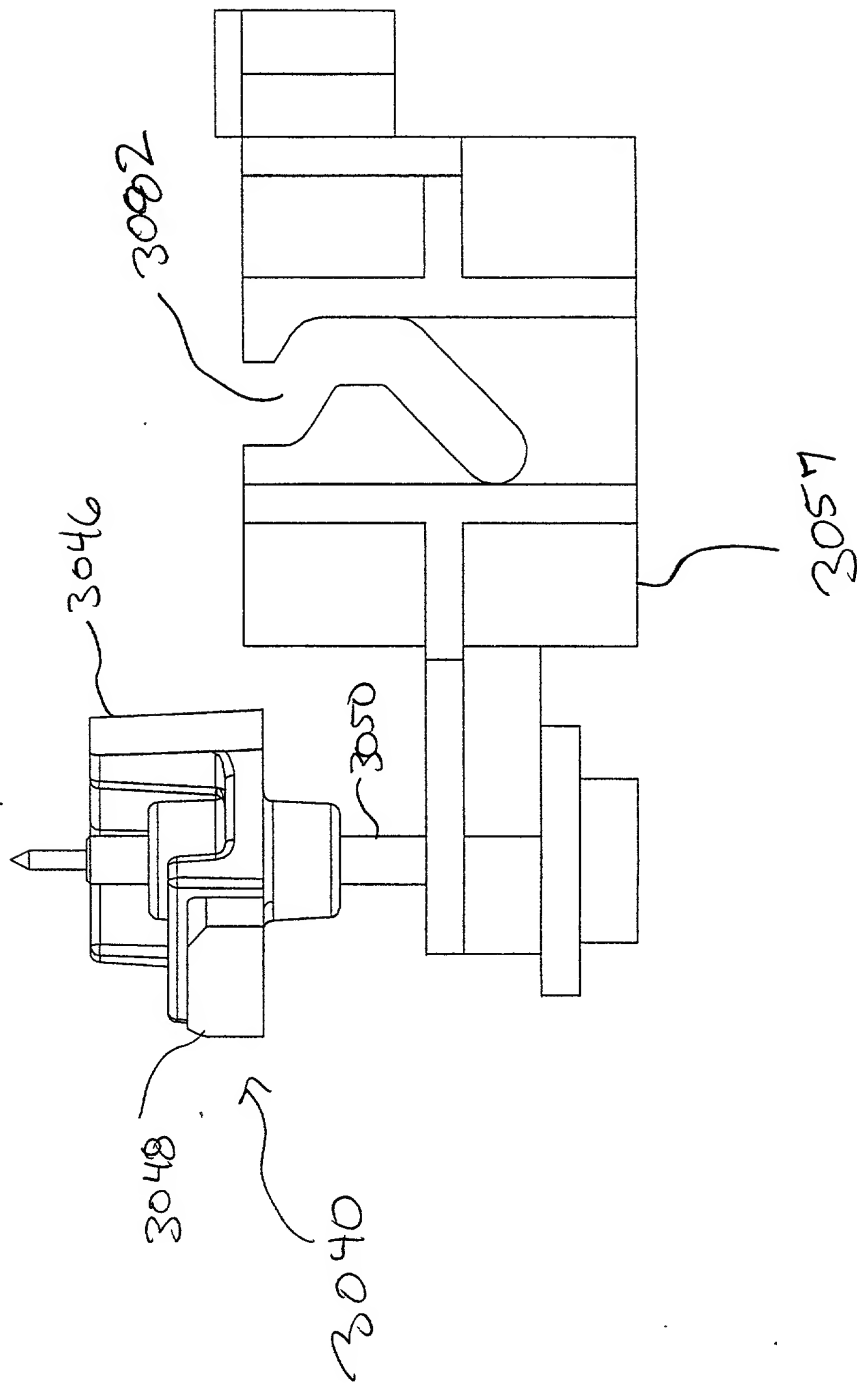


FIG. 26

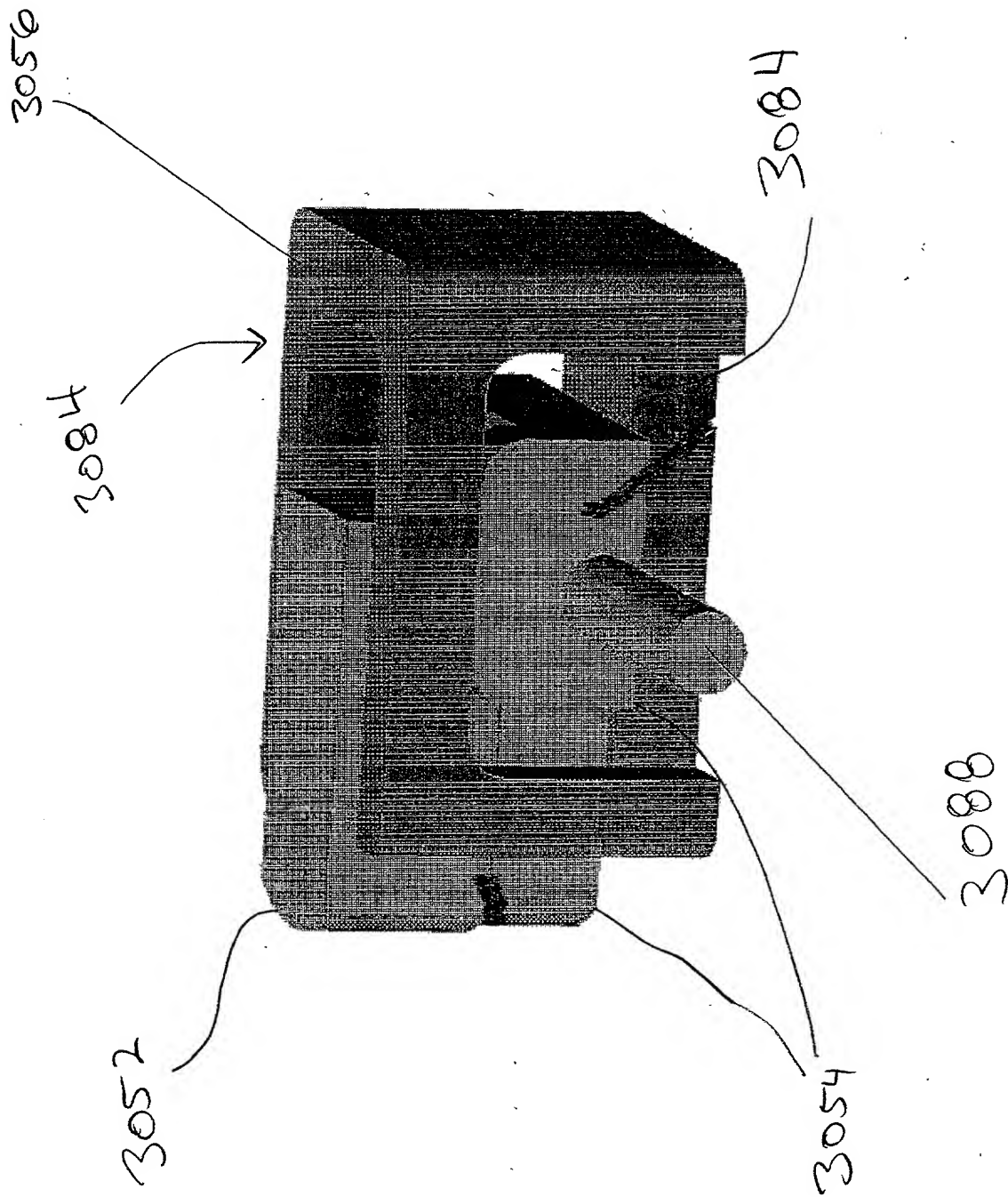


FIG. 27

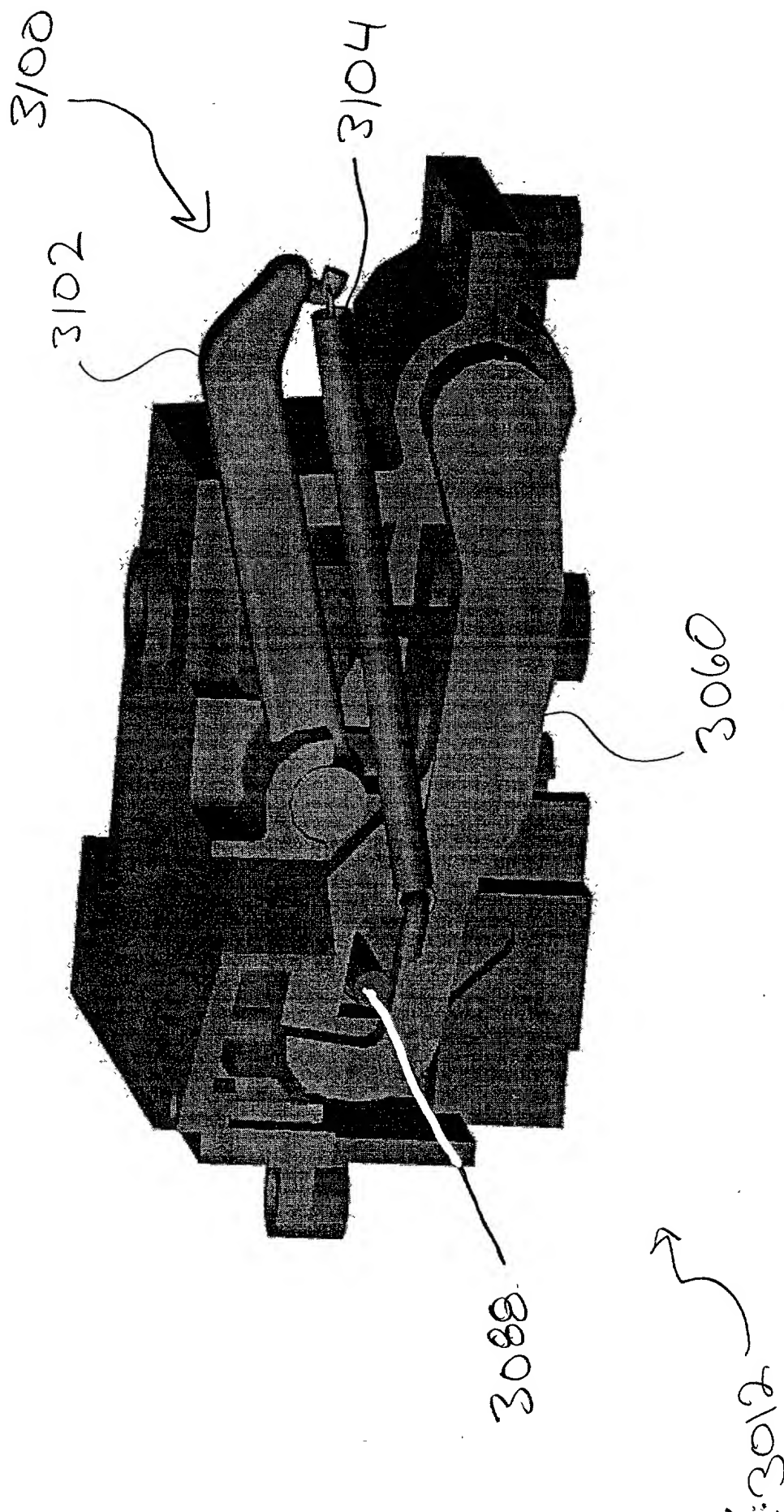


FIG. 28

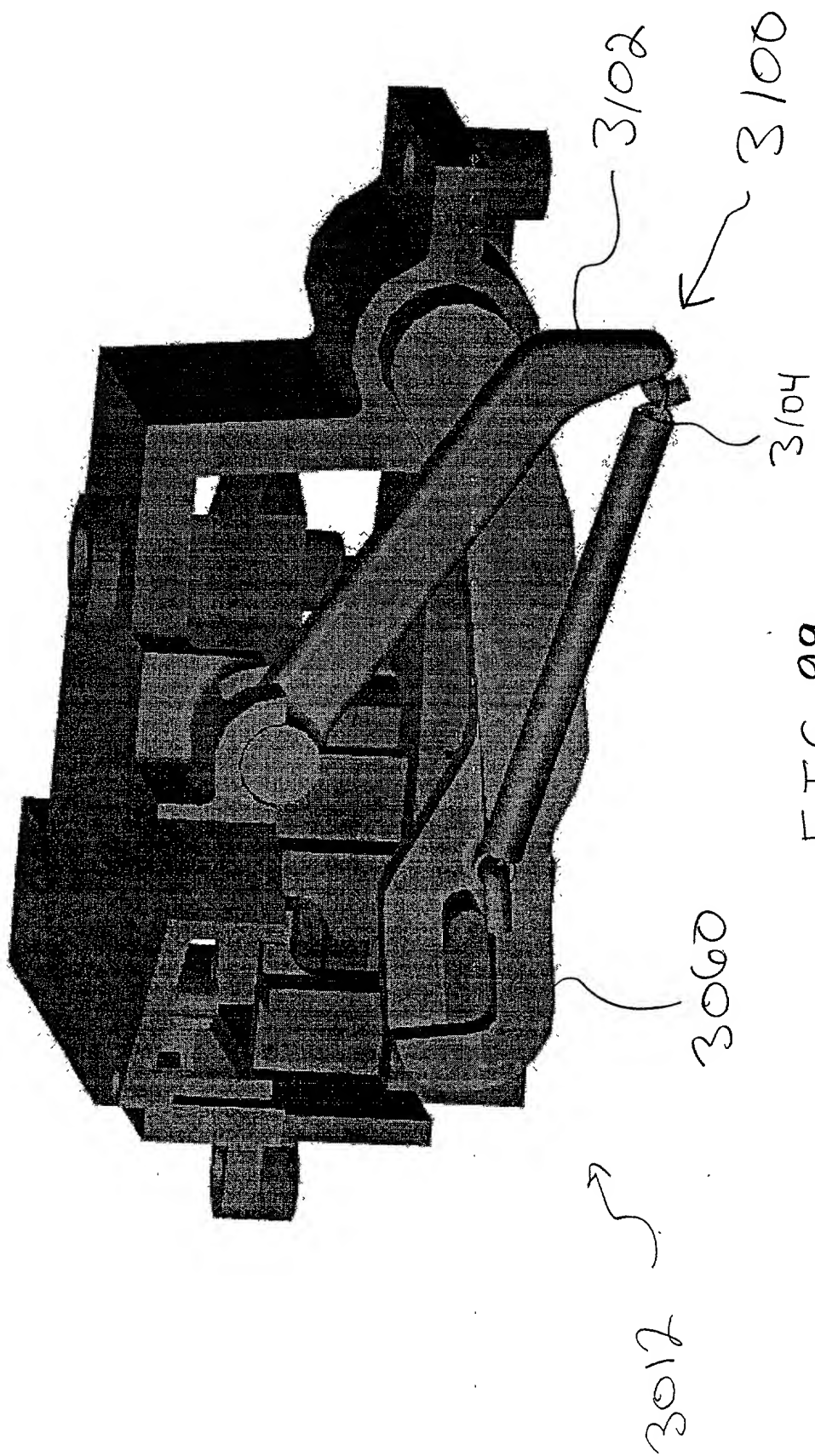


FIG. 29